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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,056	06/26/2003	Matthew M. Zhao	21132	4156
210	7590	11/23/2004	EXAMINER	
MERCK AND CO INC P O BOX 2000 RAHWAY, NJ 070650907			BERNHARDT, EMILY B	
			ART UNIT	PAPER NUMBER

1624

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,056

Applicant(s)

ZHAO ET AL.

Examiner

Emily Bernhardt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/12/03</u> . | 6) <input type="checkbox"/> Other: ____ |

Restriction to one of the following inventions is required under 35 U.S.C.

121:

- I. Claims 1-8, drawn to a process for making compounds of formula I, classified in class 544, subclass 364.
- II. Claim 9, drawn to a process for making Xantphos, classified in class 549, subclass 220.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions do not rely on each other for patentability as the use of Xantphos in the process of I is not governed by any particular process of making the phosphine ligand and is not the only ligand that can be employed for the process of I. The two groups require different searches in the process art based not only on their separate classification but also on the nature of the reaction steps being claimed in I vs II.

During a telephone conversation with Mr. Leff on 11/19/04 a provisional election was made with right of traverse to prosecute the invention of I, claims 1-8. Affirmation of this election must be made by applicant in replying to this Office

action. Claim 9 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The abstract of the disclosure is objected to because it does not convey the particular structural makeup of final products nor mention the preparation of the particular phosphine being claimed in claim 9. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: Mention of US provisional case needs to be inserted into the specification on p.1. See MPEP 1302.04.

Appropriate correction is required.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. In step c) for each of the independent claims (1,6-8) R^3 should be defined .
2. The variables R and R^2 are not “defined above” as indicated in claim 2 but rather are defined in claim 1 from which 2 depends. The same applies to claim 3.
3. In claim 4 the thiazole reactant lacks “CN” in step a) yet appears in the final product of step d). Is this an inadvertent omission? If not, step(s) for introducing the CN group should be included.
4. As recited claim 5 makes no sense as catalyst/ligand are already present in the steps recited for claim 4 and thus “further comprises” is inaccurate. Perhaps, an “in” should be inserted after “comprises” and “and” deleted after “slurry” .
5. What reduction **amination** product is formed in step c) of claim 6 when Z= CN or COOH?
6. In claim 7 it should be made clear where the halogenation occurs in step c).
7. Also in claim 7 what is being reduced? Note that pyridine precursor is methylated.
8. Same remark as made in #7 above also applies to claim 8 where precursor is hydroxymethylated.

WO'995 cited by applicants is noted since it describes instant product but employs a different coupling step for making the thiazole precursor. Remaining

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references do not particularly suggest employing instant reactants in place of those taught by WO'995. Commonly assigned WO'687 is also made of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Bernhardt whose telephone number is 571-272-0664.

If attempts to reach the examiner by telephone are unsuccessful, the acting supervisor for AU 1624, James O. Wilson can be reached at 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



Emily Bernhardt
Primary Examiner
Art Unit 1624